

SYSTEM FOR MONITORING THE QUALITY OF A COMMUNICATIONS CHANNEL WITH MIRROR RECEIVERS

ABSTRACT OF THE DISCLOSURE

A system is presented that monitors the quality of a communications channel with mirror receivers. A first receiver and a second receiver, coupled in parallel with the first receiver, receive a data signal transmitted over the communications channel. The second receiver generates an output signal. A signal integrity (SI) processor manipulates the output signal in order to determine the quality of the communications channel. The SI processor samples a phase-shifted version of the output signal, which has a phase shifted relative to a zero reference phase, and analyzes the phase-shifted version of the output signal for bit errors. In an embodiment, the SI processor manipulates the output signal to extract an eye diagram indicative of the quality of the communications channel. The SI processor non-intrusively determines the quality of the communications channel using the second receiver.